

The Automobile-Technical Bureau (ATB) of the  
Ministry of Automobile Industry of the USSR,  
in Chemnitz.

This bureau was apparently established for the purpose of gathering the technical knowledge of the Auto-Union automobile concern and to utilize it in the interest of the Russian automobile industry.

Russian management: Captain Turbin, civilian occupation: engineer with "GAZ" (Gor'kiy Avtomobil'Zavod) in Gor'kiy.

Assistant: Senior Lieutenant Dr. Brodin, not a technical man, Nobody knew in what field he obtained his doctors degree.

German management: Engineers Görke and Draeger, both formerly of Auto-Union, now in the design office of the ATB.

Dipl.-Ing. Wawrcziniok, formerly in charge of testing at the Wanderer Plant of the Auto Union, now in the same capacity with ATB.

Chief Engineer Küssner, formerly plant engineer with the Horch Plant, now plant manager in the ATB.

This bureau was working on designs for the conversion of the Opel 1.3 liter engine to roller slide control, a special control replacing valves invented years ago by the Berlin engineer Baer, developed by the Heylandt company of Berlin, and finally taken over by the Auto-Union. The difficulties with this control lie in the problem of faultless tightening and its inclination to bind.

- 1 -

SECRET  
U.S. OFFICIALS ONLY

SECRET  
U.S. OFFICIALS ONLY

In spite of several years of experiments in Germany the stage had not been reached when this control could be manufactured in serial production. Considering the particularly unfavorable conditions in the East Zone it, therefore, had to take even longer to build correctly operating test engines during the postwar period. Success was finally achieved after repeated corrective machining of the slide and its bearings, and the few available test engines were perfected to a point where these small engines would work satisfactorily under test conditions. Of course the device is in no condition for serial production. It is intended, however, to build this control later into the Opel "Kadett" engine, which is at present being copied in Russia, probably to be able to demonstrate technical advances over foreign countries and their valve-controlled motor vehicles. A secondary consideration is, of course, the fact that slide-controlled engines function well on lower-quality fuels which for Russia with its partly very knock-happy gasolines could be of great importance. However, it is not to be expected that this design will ever reach serial production.

A second development destined to failure is the design of an engine with welded cylinder-block and crankcase. During the dismantling of the Horch Plant a 24-cylinder aircraft engine of this type was found. The Russians at once suspected a new trend in engine-building and accepted the idea enthusiastically.

In reality Horch engineers themselves had not believed in the success of this undertaking but had continued ~~them~~<sup>it</sup> anyway since the research funds made available by the German Air Ministry had been so abundant that they had managed to set aside enough money to carry out future private development projects in the postwar period. The Russians were confronted with

- 2 -

SECRET  
U.S. OFFICIALS ONLY

SECRET  
U.S. OFFICIALS ONLY

these facts, but they did not believe in them and suspected that this was only a pretense designed to deprive them of this advance. Their suspicion was strengthened by the fact that a German employee of the ATB, one day, destroyed the aircraft engine with a heavy hammer. The person involved was arrested and so far has neither been released nor sentenced. On the same day the former German chief engineer, Dr. Siebler, fled to the Western Zone.

At present attempts are being made to develop and build an experimental engine together with a company in the Erzgebirge.

In 1947 the ATB was ordered to build an eight-cylinder air-cooled engine, using as many parts of the water-cooled "ZIS 130" engine as possible, and leaning on the design of similar six-cylinder engines under development at the BTB. The two bureaus were to exchange drawings and to effect the greatest possible conformity of the air-cooled parts for both engine models. The BTB furnished Chemnitz with all necessary drawings while Turbin kept advancing reasons which prevented him <sup>from</sup> <sup>ing</sup> turn his drawings over to the BTB. At the end of 1947 the project in Chemnitz was discontinued.

Another project carried out in the ATB was the development and construction of twenty testing stands for electrical motor vehicle accessories such as <sup>generators</sup> ~~dynamoes~~, starters, and ignition devices. This work was completed in 1948 and the testing stands were shipped to Moscow.

It appears that this bureau, too, will be closed; a number of engineers have already been dismissed and their drafting tables have been taken to the BTB since Chemnitz had modern drafting machines whereas the BTB had to resort to planks.

SECRET

U.S. OFFICIALS ONLY

Work in the ATB was not very pleasant for the Germans since Captain Turbin was a petty and extremely distrustful chief who kept pushing the work speed ahead and used Russian methods from the very start. In every failure or non-observance of deadlines he saw sabotage, and he gave notices indiscriminately.

Among the Russians of other offices he had the reputation of being a rather insincere person attempting to secure advantages for himself at the expense of others.

- 4 -

SECRET

U.S. OFFICIALS ONLY